NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

May 25, 2016

AIRFRAME AND ENGINE EXAMINATION SUMMARY

WPR16LA106

This document contains 6 embedded photos.

A. ACCIDENT

Location:	Winslow, Arizona
Date:	May 11, 2016
Aircraft:	Boeing B75-N1, N56200
NTSB Investigator-in-Charge:	Joshua Cawthra

B. SUMMARY

Examination of the recovered airframe and engine was conducted at the facilities of Air Transport, Phoenix, Arizona, on May 25, 2016. The examination of the recovered airframe and engine revealed no evidence of any preexisting anomalies was noted during the examination of the airframe.

C. DETAILS OF THE INVESTIGATION

1.0 Airframe and Engine Examination

Examination of the recovered wreckage revealed that the upper and lower wings were removed by the wreckage recovery company to facilitate wreckage transport. The empennage and right gear leg were also separated from the fuselage. The engine remained attached to the fuselage via its mounts. The fuselage was hoisted by a forklift and the right gear leg was subsequently removed. Throttle, mixture, and propeller control continuity was established from the rear cockpit controls to the engine.

The front spark plugs were removed and examined. All 9 spark plugs were intact and undamaged. The number 1 and 2 spark plugs exhibited black deposits within the electrode area and the remaining spark plugs exhibited gray deposits within the electrode area. All engine accessories remained attached to the engine and exhibited no damage. The carburetor was intact and all linkages were secure. The carburetor fuel screen was removed and a gray / tan liquid was drained from the carburetor. The fuel screen was free of debris. The liquid smelled similar to 100 Low Lead fuel, and tested negative for water using water finding paste. The air filter was removed and a red dirt substance was observed within the housing, however, the air filter element appeared to mostly free of debris. The gascolator screen and bowl was free of debris.

The propeller remained attached to the crankshaft and exhibited an approximate 20 degree bend aft from about mid span on either blade.

The spark plugs and carburetor fuel screen were reinstalled. About 8 gallons of fuel was added to the center wing fuel tank. The engine was primed using the airframe fuel pump and subsequently started. The engine was run for about 10 minutes at various power settings. During the engine run, a maximum power setting of 2,200 rpm and 28 inches of manifold pressure was obtained. A magneto test was performed at 1,500 rpm with a drop of about 75 to 100 rpm noted. The engine was manually shut off using the mixture.

Photo 1: The recovered airframe.

Photo 2: The recovered airframe.

Photo 3: Front Spark Plugs

Photo 4: Liquid removed from the carburetor and carburetor screen.

Photo 5: Air Filter

Photo 6: Engine run

Submitted by: Joshua Cawthra